#### U.S. Serial No. 09/160,076

## DRAFT CLAIM AMENDMENTS - NOT TO BE ENTERED

Please cancel claims 31, 41 and 47.

Please add new claims 52-54, as follows:

## 52. (New) An expression vector comprising:

a nucleotide sequence encoding a fusion immunoglobulin heavy or light chain operably linked to a promoter sequence operational for expression of said nucleotide sequence in a haemopoietic or lymphoid cell in a mammalian host;

wherein said fusion immunoglobulin comprises: an N-terminal variable region of said heavy or light chain; and at least one epitope of an antigen that stimulates an autoimmune or allergic reaction in said mammalian host; and

wherein expression of said vector in said haemopoietic or lymphoid cell of said fusion immunoglobulin induces immunological tolerance to said at least one epitope in said mammalian host.

### 53. (New) An expression vector comprising:

a nucleotide sequence encoding a fusion immunoglobulin heavy or light chain operably linked to a promoter sequence operational for expression of said nucleotide sequence in a haemopoietic or lymphoid cell in a mammalian host;

wherein said fusion immunoglobulin comprises: an N-terminal variable region of said heavy or light chain; and at least one epitope of an antigen; and

wherein expression of said vector in said haemopoietic or lymphoid cell of said fusion immunoglobulin induces immunological tolerance to said at least one epitope in said mammalian host; and

wherein said vector is a retroviral vector.

#### 54. (New) An expression vector comprising:

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a nucleotide sequence encoding a fusion immunoglobulin heavy or light chain operably linked to a promoter sequence operational for expression of said nucleotide sequence in a haemopoietic or lymphoid cell in a mammalian host;

wherein said fusion immunoglobulin comprises: an N-terminal variable region of said heavy or light chain; and at least one epitope of an antigen; and

wherein the expression of said vector in said haemopoietic or lymphoid cell of said fusion immunoglobulin induces immunological tolerance to said at least one epitope in said mammalian host; and

wherein said vector is a retroviral vector and said vector contains more than copy of the nucleotide sequence encoding said at least one epitope.

Please amend claims 32-39, 42-46 and 48-51, as follows:

- 32. (Amended) The expression vector of claim [31] <u>52</u> wherein said fusion immunoglobulin <u>comprises an N-terminal variable region of said heavy chain and has said at least one [tolerogenic] epitope inserted adjacent to the first framework region of the [N-terminus] <u>N-terminal</u> variable region of the heavy chain.</u>
- 33. (Amended) The expression vector of claim [31] <u>52</u> which is a retroviral vector.
- 34. (Amended) The <u>expression</u> vector of claim [31] <u>52</u> wherein said antigen [is associated with] <u>stimulates</u> an allergic reaction and is [an antigen] <u>a protein</u> of pollen, ragweed, or dust mite.
- 35. (Amended) The expression vector of claim [31] <u>52</u> wherein said antigen [is an autoantigen and] is selected from the group consisting of clotting factor VIII, acetylcholine receptors, collagen, myelin basic protein, thyroglobulin, and histocompatibility antigen.

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- 36. (Amended) The expression vector of claim [31] <u>52</u> which contains more than one copy of the nucleotide sequence encoding said <u>at least one</u> epitope.
- 37. (Amended) The expression vector of claim [31] <u>52</u> wherein the fusion immunoglobulin is an IgG.
- 38. (Amended) The expression vector of claim [31] <u>52</u> which [has] <u>comprises</u> the <u>identifying</u> characteristics of ATCC No. 69555.
- 39. (Amended) A transformed haemopoietic or lymphoid cell comprising the expression vector of claim [31] <u>52</u>.
  - 40. The cell of claim 39 which is a bone marrow cell.
- 42. (Amended) The expression vector of claim [41] <u>53</u> wherein said antigen [is associated with] <u>stimulates an</u> autoimmune [disease] or allergic <u>reaction in said</u> <u>mammalian host</u> [reactions of said animal].
- 43. (Amended) The <u>expression</u> vector of claim 42 wherein said antigen [is associated with] <u>stimulates</u> an allergic reaction and is [an antigen] <u>a protein</u> of pollen, ragweed, or dust mite.
- 44. (Amended) The expression vector of claim 42 wherein said antigen [is an autoantigen and] is selected from the group consisting of clotting factor VIII, acetylcholine receptors, collagen, myelin basic protein, thyroglobulin, and histocompatibility antigen.
- 45. (Amended) The expression vector of claim [41] <u>53</u> which contains more than one copy of the nucleotide sequence encoding said <u>at least one</u> epitope.

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- 46. (Amended) A transformed haemopoietic or lymphoid cell comprising the expression vector of claim [41] 53.
- 48. (Amended) The expression vector of claim [47] <u>54</u> wherein said antigen [is associated with] <u>stimulates an</u> autoimmune [disease] or allergic <u>reaction in said</u> <u>mammalian host</u> [reactions of said animal].
- 49. (Amended) The <u>expression</u> vector of claim 48 wherein said antigen [is associated with] <u>stimulates</u> an allergic reaction and is [an antigen] <u>a protein</u> of pollen, ragweed, or dust mite.
- 50. (Amended) The expression vector of claim 48 wherein said antigen [is an autoantigen and] is selected from the group consisting of clotting factor VIII, acetylcholine receptors, collagen, myelin basic protein, thyroglobulin, and histocompatibility antigen.
- 51. (Amended) A transformed haemopoietic or lymphoid cell comprising the expression vector of claim [47] <u>54</u>.

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Comments: For Serial No. 09/160,076 (Our Ref.: 30807-2000110)

Enclosed are draft claim amendments (not to be entered) for discussion during our interview tomorrow. I will phone you at 11am EST; I look forward to discussing this case with you.

Catherine Kara